Research Technician for Aerial Drone Water Sampling Project

Perennia Food Agriculture Inc. is the Province's technical development agency for Nova Scotia's agriculture and seafood sectors. Our mandate is to create value for the industry and the agency through the development and implementation of programs and consulting services. Under the auspicious of Perennia, The Centre for Marine Applied Research (CMAR) supports sustainable aquaculture, fisheries and development research throughout coastal Nova Scotia. To assist in this effort, CMAR is seeking a Research Technician for a 6-month aerial drone water sampling project located at the Centre for Ocean Venture and Entrepreneurship (COVE) in Dartmouth, Nova Scotia.

Description

To facilitate sustainable development of the Nova Scotia shellfish harvest and aquaculture industry, CMAR is collaborating with Spiri Robotics Inc., the Aquaculture Association of Nova Scotia (AANS), and Environment and Climate Change Canada (ECCC), on an initiative to test aerial drone capacity to collect water samples for shellfish harvest classification. Sample collection must meet criteria necessitated by the Canadian Shellfish Sanitation Program (CSSP). Drone water sample trials will occur alongside ECCC program sampling to compare results. Upon development of a viable drone sampling method, the procedure will be tested by industry partners and regulators to assess 'real-world' functionality. Methodologies will be documented for end users and project results submitted for peer-reviewed publication.

Under the supervision of the CMAR Research Manager, the successful candidate will work with project partners and collaborators to implement, execute, document and analyze field tests. The position will be responsible for working with project members to develop a drone sampling approach that prevents cross-contamination, ensures chain of custody, meets CSSP requirements, and is statistically comparable with traditional sampling methods.

Duties
- Develop an experimental sampling design with the project team
- Identify sampling test locations within the existing ECCC sampling regimen
- Statistical comparisons of drone sample results with traditional collection methods
- Ensure drone sampling methods meet CSSP standards
- Coordinate the test sampling schedule with project partners and ensure logistical support for field trials
- Coordinate secondary field trials for industry and regulator input

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- Analyze and document outcomes from all trials
- Work with Spiri to support design modifications as required
- Write documentation and SOP for end users

Qualifications
- A science or engineering degree in an applicable field
- Experience with regulatory water sampling
- Proficiency with field and laboratory QA/QC procedure
- Knowledge of CSSP
- Excellent written and verbal skills
- Collaboration experience
- Mechanical acumen

Assets
- Experience with the CSSP
- Experience with the Shellfish Water Classification Program
- Analysis experience in an ISO/IEC 17025: 2005 accredited laboratory
- Experience with implementing COVID field protocols

Salary range is commensurate with experience.

Perennia is an equal opportunity employer and offers a competitive compensation package based on the candidate's skill and experience. This includes base salary, benefits and employer matching RRSP plan.

To apply for this new position at Centre for Marine Applied Research, please email a combined PDF or Word cover letter and resume noting compensation expectations to Janice MacMullin, HR Generalist at jmacmullin@perennia.ca by September 18, 2020.

Applicants must be eligible to work in Canada. Only those granted interviews will be contacted. For information about Perennia visit their website at www.perennia.ca.

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